

REMARKS

Claims 1-10, 21-22, and 34-39 are pending in the present application.

Claims 1, 6, and 21 have been amended, claims 11-20, 23-33 have been cancelled without prejudice, and claims 34-39 have been newly added. After entry of the above amendments, claims 1-10, 21-22, and 34-39 are pending in the present application, of which claims 1, 6, and 21 are independent. Applicants believe that the present application is in condition for allowance, which prompt and favorable action is respectfully requested.

Applicant filed an IDS on November 16, 2005. However, Applicant has not received a signed/initialed copy of the 1449 form and therefore, requests that the Examiner return a signed/initialed copy of the 1449 form in the next office communication.

I. OBJECTIONS AND REJECTION UNDER 35 U.S.C. §102

The Examiner objected to claim 30 and rejected claims 30-33 under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Patent No. 6,006,109 issued to Shin (hereinafter “Shin”). Applicants submit that the objection and rejection are moot since claims 30-33 have been cancelled.

II. REJECTION UNDER 35 U.S.C. §103

Claims 1-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Shin, US Patent No. 6,006,109 (hereinafter “Shin”) in view of U.S. Patent No. 5,873,045 issued to Lee et. al. (hereinafter “Lee”).

With respect to independent claim 1, it is respectfully submitted that neither Shin nor Lee, collectively or individually, teaches or suggests the claimed feature of “a single jack configured to receive analog signals encoded with the digital data from the second device and to transmit

analog signals encoded with digital data to the second device” (emphasis added) in combination with both the first and second conversion units being coupled to the single jack as now claimed. Support for the newly added limitations can be found, e.g., in Fig. 4 and its respective written description in the specification.

In contrast to claim 1, Shin teaches in Figs. 4 and 5 a computer 90 in which two ports or jacks, namely microphone port 210 and headphone port 220, are used to transmit and receive data, respectively, to and from a “second device” (cellular phone 500). The cellular phone 500 also includes a corresponding microphone port and a headphone port to transmit and receive data to the computer 90, see col. 3, lines 43-46 of Shin which states “while the opposite ends of the first and second conductors within cable 522 are plug coupleable to the external side of microphone/headphone jack 520 of wireless portable telephone 500.” Therefore, Shin explicitly requires the use of two ports or jacks which is in stark contrast to independent claim 1 which requires a “single jack.” Since Shin does not teach the use of a single jack, it logically follows that Shin does not teach or suggest the coupling of the single jack to both first and second conversion units as explicitly required by claim 1. Lee does not cure these deficiencies of Shin.

For the reasons given above, neither Shin nor Lee, collectively or individually, teaches or suggests certain claimed features as now claimed in independent claims 6 and 21. In particular, neither reference teaches or suggests the claimed features of:

“receiving analog signals encoded with the digital data from the second device using a single jack” and

“transmitting the analog signals encoded with digital data to the second device using the single jack” (emphasis added) as now claimed in independent claim 6.

Likewise, neither reference teaches or suggests the claimed features of:

“means for receiving through a single jack analog signals encoded with the digital data from the second device” and

“means for transmitting through the single jack analog signals encoded with digital data to the second device” (emphasis added) as now claimed in independent claim 21.

Claims 2-5, 7-10, 22, and 34-39 depend from and include all the elements recited in their respective independent claims. Accordingly, Applicant submits that these claims are believed to be allowable based on their dependency from an allowable base claim.

In addition, with reference to newly added dependent claims 34, 36, and 38, it is respectfully submitted that neither reference teaches or suggests the claimed feature of “multi-carrier modulation” and “multi-carrier demodulation” within the claimed context. Support for this newly claimed feature can be found, e.g., in paragraph numbers 00041 – 00043 of the specification. Furthermore, with reference to newly added dependent claim 35 and similarly with claims 37 and 39, it is respectfully submitted that neither reference teaches or suggests the claimed feature of “a sensor configured to detect whether a plug has been coupled to the single jack” as now claimed. Support for this newly claimed feature can be found, e.g., in paragraph number 00038 of the specification.

For at least the foregoing reasons, Applicants respectfully request a withdrawal of the rejections under 35 U.S.C. §103.

CONCLUSION

In light of the amendments contained herein, Applicants submit that the application is in condition for allowance, for which early action is requested.

Please charge any fees or overpayments that may be due with this response to Deposit Account No. 17-0026.

Respectfully submitted,

Dated: August 30, 2006

By: W. Chris Kim
W. Chris Kim, Reg. No. 40,457
Phone: (858) 651-6295

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
Telephone: (858) 658-5787
Facsimile: (858) 658-2502